

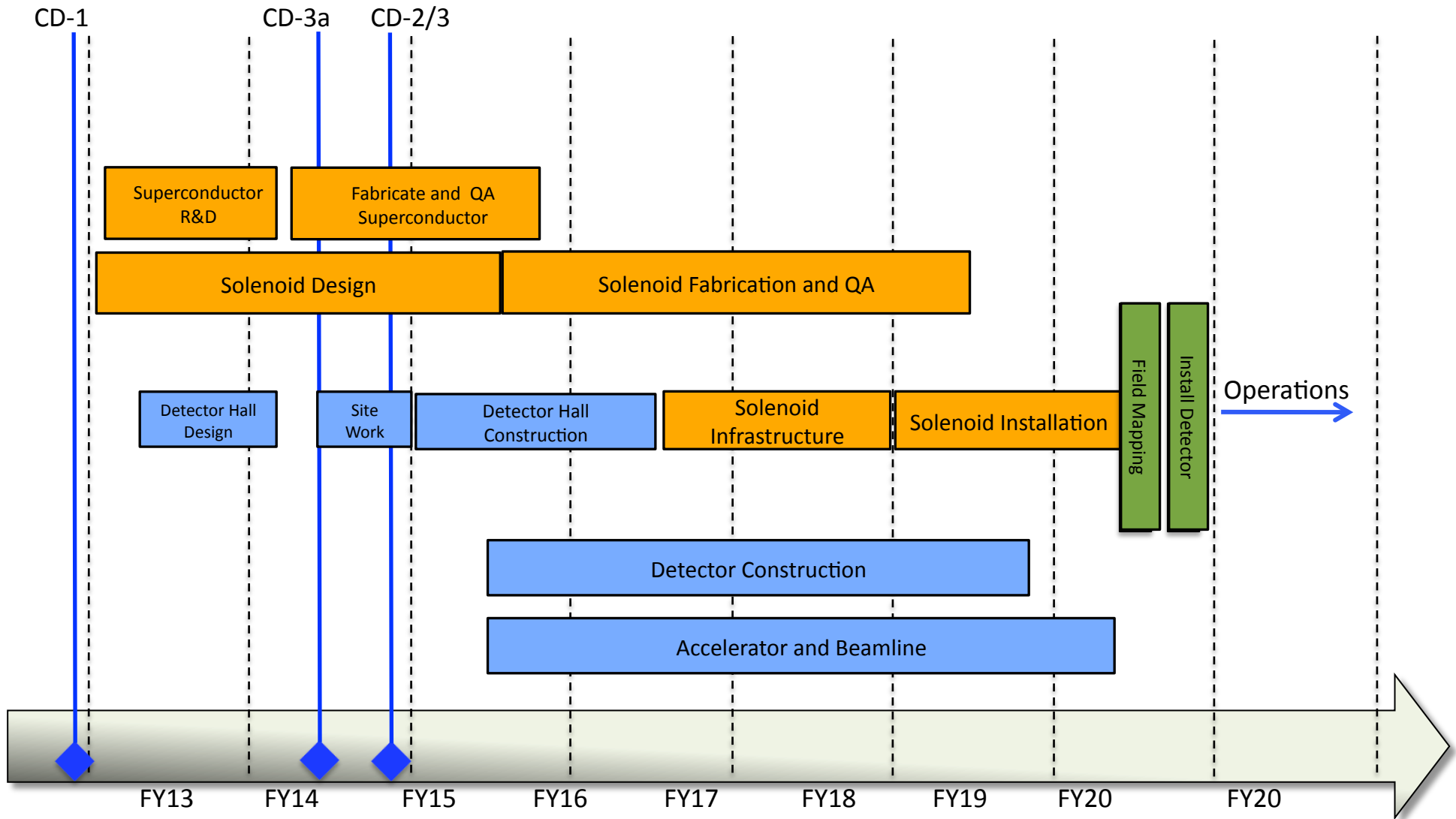
Mu2e Status and Progress

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(on behalf of the Mu2e Collaboration)
All Experimenter's Meeting
10 February 2014

Current Status

- Obtained CD-1 July 2012
- Next CD milestones
 - CD-3a scheduled for Q2 FY2014
 - CD-2/3 scheduled for Q4 FY2014
- Fully funded in FY2014 budget
 - \$15M PED + \$20M Construction
 - Need CD-3 to access Construction funds

Current Schedule



- Critical path runs through the solenoids

Preparations for CD-3a

- CD-3a will allow us to procure production quantities of long lead items affecting our critical path
 - 70 km of superconductor for our solenoids
 - Doing so ahead of CD-2 advances our schedule by about 6 months
 - The DOE supports this strategy
 - We need to complete our conductor R&D
 - Meet with DOE 27 February to discuss plan for moving forward with this

Conductor R&D

- Our solenoids require four different conductor geometries
 - Production Solenoid (PS)
 - Transport Solenoid (TS)
 - Detector Solenoid (DS-1, DS-2)
- To produce conductor, 3 main steps
 - Superconducting strand
 - Rutherford cable
 - Extruded superconductor
- Vendors contracted in early 2013 to produce R&D quantities of each conductor

Conductor R&D

- Vendors making excellent progress
- Conductor R&D campaign nearly complete
- We expect to be in a position to place orders for production lengths in March 2014

Conductor Type	Strand	Cable	Final extrusion	In Hand
PS	meets spec	meets spec	meets spec*	70%
TS	meets spec	meets spec	meets spec	100%
DS-1	meets spec	meets spec	meets spec	70%
DS-2	meets spec	meets spec	meets spec	100%

*except RRR, investigating

Preparations for CD2/3

- Principle efforts
 - Develop reference designs for PS and DS and solicit bids from industry for “Final Design and Fabricate”
 - Complete building design and solicit bids
 - Prepare documentation for DOE review
 - Technical Design Report
 - Cost and schedule information
 - ESH and QA plans

Solenoid Design Progress

- Solicitation packages for PS and DS are on the street
 - 3D solid model
 - Mature reference design
 - Detailed interface specifications
 - Detailed technical specifications and tolerances
- Expect bids back in about 11w
 - Ahead of CD-2/3 review

Building Design Progress



- Building design 100% complete
 - We will have bids in hand ahead of CD-2/3 review

CD-2/3 Documentation

- Drafts of many TDR chapters exist
- Focus of most all project personnel is to produce the BOEs and work with project controls to implement in the schedule
 - Will be ready for 27 Feb mini-review
- Significant simulation work on-going to estimate sensitivity of the apparatus we're designing/costing

Collaboration News



- ~130 Collaborators, 26 Institutions, 3 Countries
one new group admitted since last PAC – INFN Genoa

Collaboration News



Summary

- Mu2e is making excellent progress
 - Should be ready for CD-3a in March 2014
 - Aim to be ready for CD-2/3 in summer 2014
 - Mini-review 27th February will include a discussion of the plan for these upcoming CD reviews
 - If successful, will break ground on building this fall